

Synthetic Decision Group

The synthesis of intellect and technology in action

Synthetic Decision Capabilities Summary for IARPA

Rapid Explanation Analysis and Sourcing Online
(REASON) Research Program



Synthetic Decision Group

January 2023



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Civil-Military-Humanitarian Decision Support for Complex Operations

- A boutique innovation team
- Building collaborative, interactive tools.
- Science & Technology Incubator
- Integration and Concept Development
- Tactical, Operational, and Strategic focus
- Experienced team with global operational and technology experience
- New York corporation registered in Washington, DC and Virginia.

Mission Focus

- Conflict, Disaster, Crime, Intelligence
- Counterterrorism, Counterinsurgency, Peace Operations, Large-Scale Combat Operations, Maritime/Ports (BlueTech)
- Critical Infrastructure Protection
- Mass Atrocity Investigations
- Urban Operations (Warfare)
- Subterranean (SubT), SmartCities
- Urban-Littoral Operations
- Mission Planning & Operations, Supply Chain/Logistics

Technology

- Visualization, Geospatial Intelligence (GIS)
- Data Analytics, Artificial Intelligence (AI), Machine Learning (ML), Game Theory, Algorithms, Quantum-Digital Interface
- Virtual & Augmented Reality, Holograms, Edge Devices, Sensor Integration
- Automated Investigations, Planning, Course of Action Development, After Action Reports, Wargaming, Red Teaming
- Drones, (UAS, UGV, UMV), Robotics

Process

- Multidomain C4ISR, Predictive Analytics, Forecasting
- Swarming/Counter-swarming
- Collaboration/Partnerships/Co-Invention
- Technical Experimentation, Exercises, Rapid Prototypes, Cyber & Operational Security, Legal Framework(s)
- Engage Clients, Understand Operating Environments and Inter-Dependencies
- **Integrate, Identify Gaps, Innovate**



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SynDG Experience/Core Skills

Analytical Tradecraft
Co-Production of Intelligence
Operations-Intelligence Fusion
Transaction Analysis
Terrorism Early Warning
Geospatial Intelligence
Open Source Intelligence (OSINT)
All-Source Fusion
Mission Planning
Collection Management
Algorithm Development
Technology Test & Evaluation
Operational Integration



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SynDG Featured Capabilities

Analytical Tradecraft
Co-Production of Intelligence
Geospatial Intelligence Integration
Operational Integration
Technology Test & Evaluation
Exercises/Practical Field Tests
Immersive Training



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SynDG Core Team

George W. Davis Jr.

President

Dr. Richard Rotanz

Chief Operating Officer

Dr. John P. Sullivan

Chief Strategy Officer

Chris Coyle

Chief Innovation Officer

Craig Petrella, CPA, MBA

Chief Financial Officer